

Abstract

The invention relates to a fuel injection system for internal combustion engines, which includes a high-pressure part and a low-pressure part. In the high-pressure part, fuel from a fuel container is delivered to a high-pressure reservoir (5) via a high-pressure pump (4) and a high-pressure line (32). Via high-pressure supply lines (6), injectors (7) are supplied from the high-pressure reservoir (4). In the low-pressure part, the injectors (7) communicate via injector return lines (8) with a low-pressure reservoir (9), and in the low-pressure reservoir (9), a pressure of ≤ 50 bar is maintained by a pressure holding valve (11). At a pressure in the low-pressure reservoir (9) above the opening pressure of the pressure holding valve (11), the fuel is returned to the fuel container via a return line (12). The low-pressure reservoir (9) communicates with the high-pressure line (32) of the high-pressure part via an overflow valve (15) and an overflow line (33).

(Fig. 2)